

Rosti Medical Solutions

*Your Plastic Injection Moulder
and Contract Manufacturer*

Inside
Rosti
Medical Solutions

April | 2025

Your medical solutions partner / Global insight / Expertise in time to market / Key trends / Poland Cleanroom expansion / Sustainability & Innovation center / Meet the team

Rosti - your Medical Solutions partner

Rosti is a **global plastic injection moulding** company and **contract manufacturer**, we are committed to **sustainability** and **reducing our environmental impact**.



From product development and design, to supply chain management and distribution, we have the knowledge and capabilities to provide innovative solutions to the highest levels of accuracy and reliability. Our contract manufacturing services provide a complete end-to-end solution, backed by global resources for large-scale projects, while maintaining flexibility and attention to detail that set us apart.

We bring engineered precision moulding, bolstered by leading edge innovation to enable your next generation medical technology. We bring over two decades of

expertise working with leading medical device companies providing injection moulded components, sub-assemblies and finished devices, fully complying with FDA 820 and MDR regulatory requirements, where performance and reliability are critical.

With a multi-million euro investment to support you to take your product 'from Concept to Reality'.

We apply cutting-edge innovation and engineering expertise to solve complex development and manufacturing challenges. Access to extensive technology provided by our globally strategically located

innovation labs, provides a deep, front-end innovation expertise. Our labs support you in agile development programmes that deliver ideas to market more rapidly and cost-effectively than traditional methods.

Rosti Medical solutions seamlessly incorporate cutting-edge technologies into medical and consumer health devices to empower our customers in navigating the ever-evolving healthcare landscape successfully.

[Find out more](#)

A Global insight for - Medical Moulding

with **Gustav Reingsdahl**

1) What themes have emerged during 2024 in the plastic injection moulding sector that the medical market needs to be aware of?

In 2024, we've seen several key trends emerge in plastic injection moulding, particularly within the medical sector. Some of the most significant include:

Regulatory and Material Compliance Challenges

The evolving regulatory landscape continues to impact material selection and manufacturing processes. With stricter guidelines from the FDA and EU MDR, medical manufacturers must ensure that plastic components meet new biocompatibility, and sterilization requirements. This has led to an increased demand for advanced material testing and compliance tracking within the injection moulding process.

Balancing Nearshoring with Global Manufacturing Capabilities

A key trend in the medical market is the shift toward nearshoring, as medical OEMs seek greater supply chain resilience and

efficiency. However, while nearshoring gains momentum, OEMs are also increasingly looking for global partners who can support them across multiple locations worldwide. They require manufacturing partners with the agility to provide localized solutions while leveraging global resources, ensuring consistency, scalability, and seamless market access.

Advanced Automation and Smart Manufacturing

The integration of automation, robotics, and AI-driven quality control systems has continued to gain momentum. The medical sector, in particular, has embraced smart manufacturing to improve precision, reduce waste, and increase production efficiency.

Sustainability and Biodegradable Materials

The medical industry is under increasing pressure to reduce its

environmental impact. This year, we've seen a growing interest toward sustainable solutions, including design for sustainability, sustainable polymers, and recyclability



Overall, 2024 has been a year of innovation and adaptation for the plastic injection moulding sector, particularly within the medical market. As demand for precision, compliance, and sustainability continues to rise, manufacturers must stay ahead of these trends to remain competitive in the evolving landscape.

2) How does Rosti's capabilities and global technologies assist in bringing your product quicker to market?

Through our Innovation Centers, we offer rapid prototyping services, including 3D printing and soft tooling, allowing us to quickly test, refine, and validate product designs. This significantly shortens the initial development phase and ensures that potential issues are identified and resolved early in the process.

We provide a fully integrated design-to-manufacturing approach, covering product development, precision injection moulding, assembly, and packaging under one roof. This eliminates unnecessary delays associated with outsourcing different stages of production, making the entire process more seamless and efficient.

The medical industry is heavily regulated, and navigating compliance can be a complex challenge. Rosti has deep expertise in ISO 13485-certified medical manufacturing and work closely with clients to ensure

all materials and processes align with the latest regulatory requirements, preventing potential roadblocks in market approval.

With manufacturing facilities across Europe, Asia, and North America, we provide customers with strategic geographic advantages. Our ability to nearshore production helps reduce lead times, optimise logistics, and comply with regional regulatory requirements, ensuring faster delivery to market. Further, our flexible production setup ensures a smooth transition from low-volume prototyping to full-scale mass production, reducing market entry times while maintaining cost efficiency.

3) How has the heightened importance of sustainability and working with the right partner to deliver your product been implemented by Rosti?

As the push for greener manufacturing intensifies, we have implemented a range of sustainable practices such as, material innovations, design optimisations such as lightweighting and recyclability, operational efficiency, and green energy focus.

Sustainability is no longer an option, it's a necessity. We take a proactive approach, integrating environmentally friendly practices, responsible material sourcing, and advanced manufacturing technologies to ensure that our clients can deliver innovative, high-quality,

and sustainable products to the market.

4) What trends do you see shaping the medical industry in 2025, and how is the company preparing for them?

One emerging trend we see and believe will keep developing is the increase in home health & wearable health, where, with increasing adoption of remote patient monitoring, home diagnostics, and wearable medical devices, there is a growing demand for

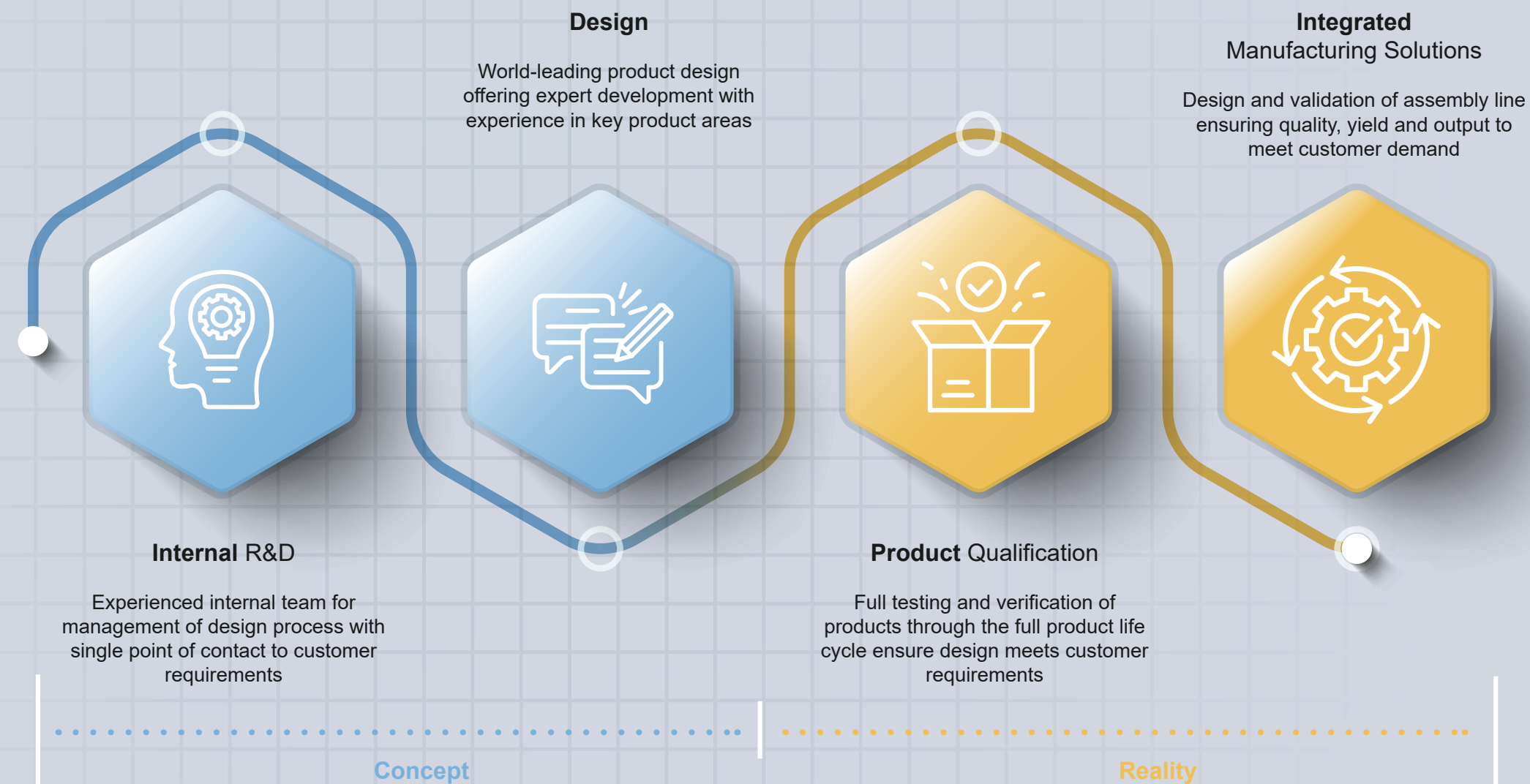
"Our ability to nearshore production helps reduce lead times"

miniaturised, high-precision plastic components. Rosti is investing in high-precision moulding technologies, ensuring that we can meet the complex requirements of next-generation wearables and home-use devices.

Sustainability and circular economy initiatives will become increasingly more important, especially for the healthcare sector when it comes to reducing waste and carbon footprint. Rosti is working closely with some customers to see how we can support them in limiting their carbon footprint.

[Find out more](#)

Working as a full integrated solution provider “from concept to reality”



Rosti Group’s Expertise in Accelerating Time to Market

In the competitive world of medical device manufacturing, speed to market is critical. Rapidly transforming concepts into reality can mean the difference between setting industry benchmarks and playing catch-up. Rosti Group stands at the forefront of this challenge, offering unparalleled innovation capabilities and a groundbreaking 72-hour concept-to-reality process that empowers medical companies to launch products faster than ever before.

Meeting the Urgency of Medical Innovation

Bringing a medical device to market swiftly is more than a competitive advantage, it is essential for addressing pressing healthcare needs, securing regulatory approvals, and ensuring commercial success. However, speed must be balanced with precision, compliance, and reliability.

The Power of Our Innovation Centres

Equipped with state-of-the-art prototyping, testing, and analysis tools, our Innovation Centres enable real-time refinement of designs and swift transition from concept to production readiness. By identifying and addressing potential design flaws early, we help ensure seamless manufacturing and regulatory compliance.

Our collaborative approach means medical and pharmaceutical companies benefit from tailored support at every stage of the product development cycle, with our expertise enhancing efficiency and speeding up time to market.

72-Hour Concept-to-Reality Process

Our standout offering is our industry-leading 72-hour concept-to-reality process, an innovation that redefines rapid development. In an industry where design and prototyping phases can stretch over months, our ability to deliver a functional prototype in just three days provides a crucial advantage. By dramatically reducing the time from concept to prototype testing, we enable medical device companies to adapt quickly to market demands and regulatory requirements with confidence.

Precision Manufacturing and Compliance Excellence

From meticulous material selection to cleanroom manufacturing environments, our focus on quality is unwavering. Our commitment to both speed and precision means that medical companies can rely on us to deliver market-ready solutions that meet the highest standards of safety, functionality, and regulatory compliance.

Partnering for Success

Rosti Group is more than a manufacturing partner, we are a partner in innovation for the medical sector. By harnessing our unique capabilities, companies can accelerate development, refine designs with confidence, and bring groundbreaking medical devices to market faster than ever before.

In an industry where every second counts, Rosti’s expertise in speed-to-market solutions makes all the difference.

[Find out more](#)

Foreseeing -

4 Key Trends

Personalised Medicine and Customisation

Personalised medicine will continue to grow, with treatments tailored to individual genetic profiles, leading to a rise in demand for custom medical devices, diagnostics, and therapies.

There will be an increasing need for custom-made components for devices such as implants, drug delivery systems, and diagnostic kits. Plastic injection moulding will be key for producing small, precise, and personalised medical parts in small batches.

Wearable Medical Devices, Remote Monitoring

The rise of wearable health tech, including devices for continuous monitoring of vital signs, glucose levels, and even mental health, will drive demand for small, reliable, and durable plastic components.

Precision, miniaturisation, and biocompatibility will become even more critical. Materials with specific mechanical properties and sterilisation capabilities will be required, and plastic injection moulding will be instrumental in delivering high-quality, lightweight parts for these devices.

3D Printing and Additive Manufacturing Integration

The integration of 3D printing with traditional manufacturing methods like injection moulding will grow, especially for prototyping and producing complex parts for medical devices.

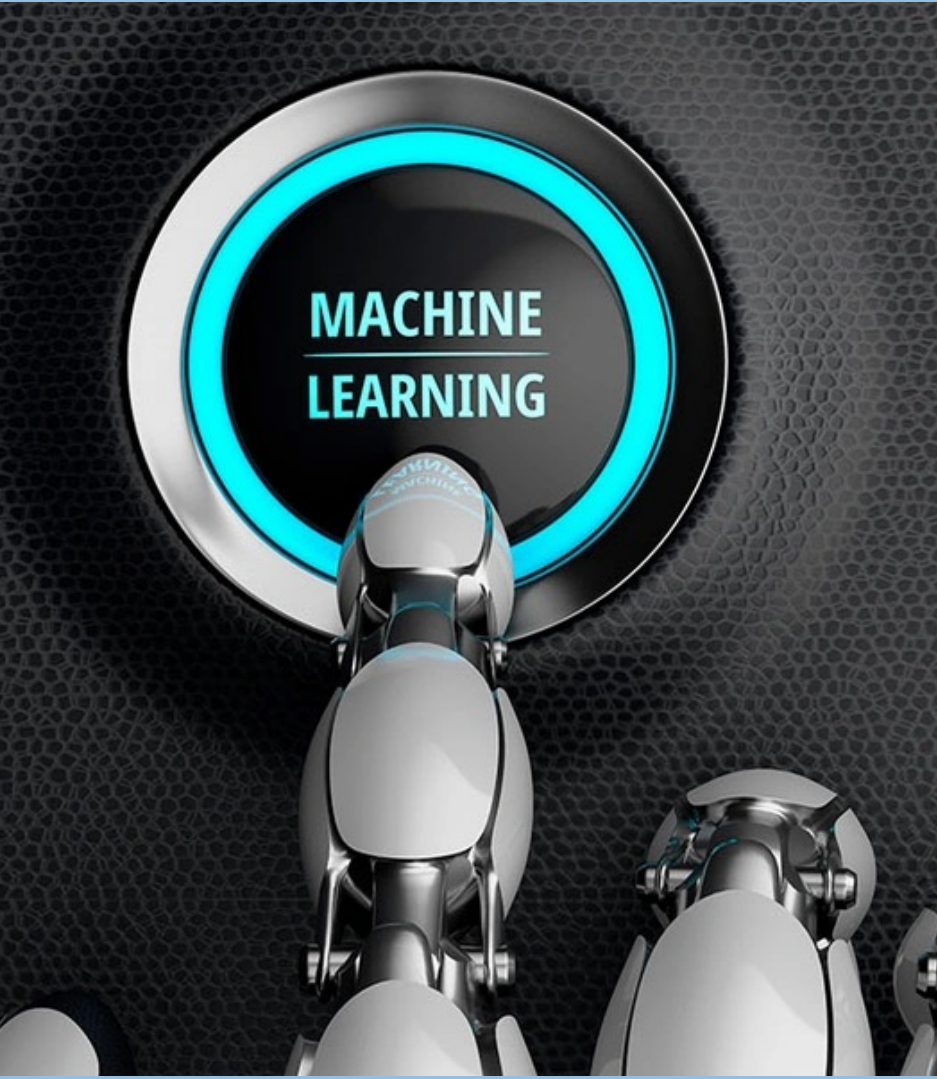
Companies will use injection moulding for large-volume production of base parts, while 3D printing will be used for complex geometries or custom components that cannot be easily moulded. Hybrid manufacturing processes will become more common, especially for personalised medicine and surgical implants.

Cost-Reduction Strategies and Efficiency Gains

With pressure on margins and a focus on cost-effectiveness, the industry will push for higher efficiency in injection moulding processes, including optimising tool life, material usage, and energy consumption. Manufacturers will need to balance cost and performance while meeting high medical industry standards.

Innovations in process optimisation, such as faster cycle times and reduced scrap rates, will be important to maintain competitive pricing, especially for large-volume medical device production.

[Find out more](#)





Rosti Expands Cleanroom Capabilities following New Contract Awards in Poland

Rosti has significantly expanded its capabilities in medical injection moulding with the completion of its state-of-the-art Class 8 and Class 7 Cleanroom facilities in Poland,

This strategic investment strengthens Rosti's position as a key supplier in the medical industry, enhancing its ability to deliver high-quality, precision-moulded components for critical healthcare applications.

Precision Injection Moulding and Bonding Process

Rosti continues to enhance its production capabilities by investing in additional Engel medical injection moulding machines, further improving precision and efficiency. The company is also introducing a UV adhesive bonding process, which will provide strong, durable, and reliable assembly for critical medical components. This advanced bonding technique

ensures the longevity and performance of the finished products, aligning with the highest industry standards.

We are proud to introduce our new Sustainability & Innovation Centre

At the forefront of our commitment to sustainability and innovation. This cutting-edge facility is dedicated to developing and implementing sustainable solutions tailored to meet the needs of our customers, strategically placed within our facilities in Suzhou, China, Bialystok, Poland, and Germantown, USA to support our customers globally

Research and Development

Our centre is equipped with state-of-the-art technology and staffed by a team of experts dedicated to researching and developing new materials, processes, and products. We focus on creating solutions that are not only sustainable but also high-performing and cost-effective. Our R&D efforts are aimed at reducing waste, improving energy efficiency, and utilizing renewable resources.

Collaborative Innovation

We believe in the power of collaboration. Our Sustainability &

Innovation Centre works closely with customers, industry partners, and academic institutions to foster a collaborative environment where ideas can flourish. By partnering with leading experts and innovators, we can accelerate the development of groundbreaking solutions that address both current and future sustainability challenges.

Sustainable Product Design

Sustainable design is at the heart of our innovation strategy. We strive to create products that are designed with the entire lifecycle in mind, from raw material sourcing to end-of-life disposal. Our design approach prioritises recyclability, reusability, and reduced environmental impact, ensuring that our products contribute to a circular economy back by data from LCA tools.

Advanced Injection Moulding Techniques

With injection moulding at our core our customers benefit greatly from the advancements made at our Sustainability & Innovation

Centre for reducing the Co2 impact of polymer products. We are developing and refining techniques that minimise material usage, reduce cycle times, and enhance product durability. Through these innovations, we help our customers achieve their sustainability goals while maintaining the highest standards of quality and performance.

Commitment to Our Customers

We understand that our customers are seeking solutions that not only meet their business needs but also align with their sustainability values. The Sustainability & Innovation Centre is committed to providing customised solutions that support our customers' sustainability initiatives. Whether it's through the development of new eco-friendly materials or the optimisation of manufacturing processes, we are dedicated to helping our customers achieve their sustainability objectives.

[Find out more](#)



Our Medical Team



Denny **McGuigan**
North America

Email - DMcGuigan@rosti.us



Mateusz **Surmacz**
Europe

Email - biamsu@rosti.com



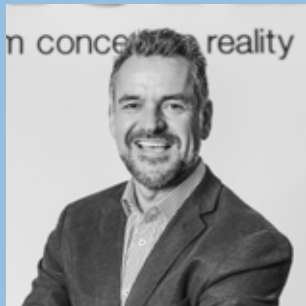
Michael **Li**
Asia

Email - suamtl@rosti.com



Christopher **Stringer**
Global

Email - bhxcst@rosti.com



Karl **Stillman**
Global

Email - kst@rosti.com



Gustav **Reingsdahl**
VP Medical Solutions

Email - malgre@rosti.com



Rosti Group. Big enough to **cope**, small enough to **care**.

We would **love** to hear from **you**:



www.rosti.com



Rosti Group